Handout / references for Steve Draper talk at Bath on 9 May 2017

Below are references alluded to in my talk.

(A long list of most of the references in Education that I find myself talking about is here:

http://www.psy.gla.ac.uk/~steve/courses/cereRefs.html)

Literature references by author

Arthur, N. (2006). Using student-generated assessment items to enhance teamwork, feedback and the learning process. *Synergy: Supporting the Scholarship of Teaching and Learning at the University of Sydney*, **24**, 21–23.
[paper on getting students to design MCQs in Accountancy]

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 PDF copy
also published as: Bloom,B.S. (1971) "Learning for mastery" ch.3 pp.43-57 in Bloom,B.S., Hastings,J.T. & Madaus,G. (eds.) *Handbook of formative and summative evaluation of student learning* (New York: Mcgraw-Hill) and
also as ch.8 pp.153-175 in B.S.Bloom (1981) (Ed.) *All Our Children Learning* (London: McGraw-Hill)
[Mastery learning: recommended source]

Bloom, B.S. (1974) "Time and Learning" *American Psychologist* vol.29 no.9 pp.682-688
doi: 10.1037/h0037632
[Mastery learning, Carroll model of learning]

Crouch, C.H. and Mazur, E. (2001), "Peer Instruction: Ten years of experience and results", *American Journal of Physics*, vol.69, no.9 pp.970-977 doi: 10.1119/1.1374249
Also available at   https://www.usna.edu/Users/physics/rwilson/_files/documents/peer.pdf
[EVS. PI. peer discussion. Dramatic improvement in test results]

Dahlgren, Lars-Owe (1984) ch.2 in Marton et al. (1984 / 1997 p.23ff. "Learning conceptions and outcomes"   Online copy
[Economics example of shallow learning demo.]

Draper,S.W. (2009a) "Catalytic assessment: understanding how MCQs and EVS can foster deep learning" *British Journal of Educational Technology* vol.40 no.2 pp.285-293
doi:10.1111/j.1467-8535.2008.00920.x
[Peer effects. Catalytic assessment. Contains key arguments used in the talk.]

Gardner-Medwin AR (2011) *Reasonable Doubt: Uncertainty in Education, Science and Law*. Proc.Brit.Acad. 171, 465-483.   [CBM (Certainty Based Marking)]

Gardner-Medwin, A.R. Publications list: http://www.tmedwin.net/~ucgbarg/pubteach.htm

Hake,R.R. (1998a) "Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses" *Am.J.Physics* vol.66 no.1 pp.64-74   PDF copy
[EVS. Dramatic improvement in test results]

Howe, C.J., Tolmie, A. & Rodgers, C. (1992) "The acquisition of conceptual knowledge in science by primary school children" *Brit. j. Dev. Psy.*vol.10 no.2 pp.113-130
doi:10.1111/j.2044-835X.1992.tb00566.x [Peer interaction.]

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Howe,C. (various) A list of some of Howe's publications

Hunt, D. (1982) "Effects of human self-assessment responding on learning" *Journal of Applied Psychology* vol.67 no.1 pp.75-82.   http://dx.doi.org/10.1037/0021-9010.67.1.75

Marton,F., D.Hounsell & N.Entwistle (1984 / 1997) (eds.) *The experience of learning* (Edinburgh: Scottish academic press) The whole book is now available free on the internet at http://www.ed.ac.uk/institute-academic-development/learning-teaching/research/experience-of-learning
[Key book on deep and shallow learning work.]

Mazur, Eric (1997). Peer Instruction: A User's Manual (Prentice Hall, Upper Saddle River, NJ)

Miyake,N. (1986) "Constructive interaction and the iterative process of understanding" *Cognitive Science* vol.10 no.2 pp.151-177   doi:10.1207/s15516709cog1002_2
[Peer interaction for learning; "constructive interaction".]

Morrow,M.I. (2006) "An Application of Peer Feedback to Undergraduate's Writing of Critical Literature Reviews" *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*" vol. 1 no.2 pp.61-72   link
[Reciprocal Peer Critiquing]

Smith,M.K., Wood,W.B., Adams,W.K., Wieman,C. Knight,J.K., Guild,N. & Su,T.T. (2009) "Why peer discussion improves student performance on in-class concept questions" *Science* vol.323 2 Jan. 2009 pp. 122-124 doi:10.1126/science.1165919
[Best paper on Mazur's PI learning design / teaching method; EVS. Peer discussion.]

Pointers / References to software

Aropä: (software to administer reciprocal peer critiquing in large classes)
    A current (Jan 2017) report
    A current introduction on a web page
    My web page giving a quick intro (somewhat out of date)

Assertion-Reason questions: http://www.caacentre.ac.uk/resources/objective_tests/assertion.shtml

CBM (Certainty Based Marking)   http://www.ucl.ac.uk/lapt/index.htm

PeerWise:
    Academic publications about it
    Main web site
    My web page giving a quick intro (somewhat out of date)